

REMARKS

Initially, applicant thanks the Examiner for the personal interview conducted with the undersigned on May 28, 2008. The substance of the interview is reflected in the remarks below.

Claims 43-102 are pending in the application with claims 43, 47, 51, 55, 59, 64, 69, 74, 79, 83, 87, 91, 95 and 99 being independent. Independent claim 43 has been amended to recite that "long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device." The remaining independent claims have been similarly amended to add this feature. As discussed at the interview, support for this feature may be found, for example, at paragraph 0059 of the published application (U.S. Publication No. 2004/0174485). As noted in that paragraph:

[T]he orientation of the liquid crystal material is such that when there is no electric field the long axis of the liquid crystal material is uniaxially oriented in parallel with the substrate and in parallel with the rubbing direction. Then, when an electric field is impressed, the liquid crystal molecules in the vicinities of the orienting film surfaces, which are subject to a strong orientation restricting force, remain parallel with the rubbing direction[.]

Thus, when there is no electric field (i.e., when not using the thin film transistor to drive the liquid crystal display device), the long axes of the liquid crystal molecules are kept parallel with a surface of the first substrate. No new matter has been introduced.

The claims have been rejected as being unpatentable over Funada (JP 53-48542). Applicant requests reconsideration and withdrawal of this rejection because Funada does not describe or suggest that long axes of liquid crystal molecules in the liquid crystal layer are kept parallel with a surface of the first substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device, as recited in independent claim 43 and similarly recited in the other independent claims.

As shown in Funada's Figs. 2 and 6, the long axes of the liquid crystal molecules in Funada's liquid crystal layer are not kept parallel with a surface of the substrate. For example,

with reference to Figs. 5-7 of Funada, if voltage source V_2 of Funada is said to include the thin film transistor, then Fig. 6 shows that long axes of liquid crystal molecules in the liquid crystal layer are **not kept** parallel with a surface of the first substrate when not using the thin film transistor to drive the liquid crystal display device. Similarly, if voltage source V_1 of Funada is said to include the thin film transistor, then Fig. 6 shows that long axes of liquid crystal molecules in the liquid crystal layer are **not kept** parallel with a surface of the first substrate when driving the liquid crystal display device using the thin film transistor.

Thus, while the Examiner correctly notes that Funada's Fig. 7 indicates that the long axes of the liquid crystal molecules may, at some times, be parallel to the surface of the substrate, the axes are not kept parallel to the surface of the substrate both when driving the liquid crystal display device using the thin film transistor and when not using the thin film transistor to drive the liquid crystal display device. Rather, they switch between being parallel, as shown in Fig. 7, and perpendicular, as shown in Figs. 5 and 6.

Accordingly, for at least these reasons, the rejection should be withdrawn.

At the interview, the Examiner indicated that applicant might still need to amend the specification to identify Figs. 8A and 8B. Applicant notes that the amendment filed on May 31, 2005 and entered by the Examiner on June 27, 2005, is believed to address the Examiner's concerns. In the event that the Examiner believes that further amendments are needed, please contact the undersigned.

Applicant : Shunpei Yamazaki et al.
Serial No. : 10/807,273
Filed : March 24, 2004
Page : 16 of 16

Attorney's Docket No.: 07977-
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The fee in the amount of \$460 in payment of the two-month extension fee is being paid concurrently herewith on the Electronic Filing System (EFS) by way of Deposit Account authorization. Please apply any other charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: 5/28/08



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